

*Case report*

## Spontaneous oesophageal rupture in late pregnancy

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Oesophageal rupture in pregnancy is extremely rare. Kennard<sup>1</sup> described the post-mortem findings of a ruptured oesophagus in a 37-year-old primigravida who suddenly collapsed and died shortly after a forceps delivery. The labour had been prolonged and the patient had earlier complained of dyspnoea but no chest pain. Henry<sup>2</sup> reported a case of spontaneous rupture of the oesophagus following severe vomiting in an 18-year-old primigravida at 10 weeks' gestation. She settled with conservative treatment, was discharged 12 days later and reached 32 weeks' gestation and presumably subsequent delivery without further problems.

### CASE HISTORY

A 25-year-old primigravida was admitted at 35 weeks' gestation with a history of severe and excessive vomiting for one week and crampy abdominal pain for one day. Three days prior to admission, she suddenly developed retrosternal pain but there was no accompanying shortness of breath. She noticed swelling of the left side of her face and neck on the day of admission. On examination, a swelling was noted extending from below her left orbit to her neck. Crepitus was readily detectable over the swelling in keeping with subcutaneous emphysema. She was pale and dehydrated, pulse 110 per minute, blood pressure 130/90 mmHg. Her chest was clinically clear. The white cell count was raised,  $22.9 \times 10^9/l$ . Chest X-ray showed mediastinal and subcutaneous emphysema but no hydrothorax or pneumothorax (Figure). A diagnosis of spontaneous oesophageal rupture was made. Oral fluid was prohibited and nasogastric suction was employed. Fluid and electrolytes were given intravenously and she was treated intravenously with mezlocillin, gentamycin, metronidazole and cimetidine. Soon after admission, labour was induced because of the passage of meconium-stained liquor. At birth the baby's condition was poor, due to aspiration of meconium. The baby appeared dehydrated, with a blood urea of 15 mmol/l, which was equivalent to the mother's blood urea. A niopam and barium swallow carried out the following day in the mother failed to show a leak from the oesophagus. On the fifth day after admission, the nasogastric tube was removed, oral fluids were commenced and the antibiotics were stopped. Ten days after admission she was discharged.

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Rupture of the oesophagus can be the most rapidly fatal of all perforations of the alimentary tract. The most common cause is an episode of violent vomiting. The diagnosis is strongly suggested by the clinical triad of vomiting, chest pain and subcutaneous emphysema.<sup>3</sup> Pain is the most striking as well as the most common symptom although it may be minimal or absent as in this case. Anteroposterior X-ray of the neck, chest and upper abdomen taken with the patient erect is the most valuable examination, and will reveal the presence of air in the mediastinum, cervical tissues or pleural cavity before it is demonstrable clinically.

In the present case the perforation must have occurred anteriorly and sealed itself off, accounting for the absence of a pleural effusion. A niopam and barium swallow failed to demonstrate a perforation in our patient, but gastrograffin or barium can slide past a sizeable oesophageal tear without extravasating unless the contrast is slowly injected down the nasogastric tube while it is being withdrawn.<sup>4</sup> Spontaneous oesophageal rupture usually requires emergency operation, although a few cases have been reported<sup>2, 3</sup> where patients have survived following conservative treatment as in this case.

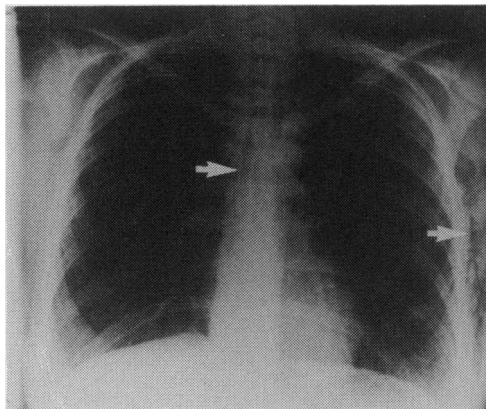


Fig. Chest X-ray demonstrating subcutaneous and mediastinal emphysema due to oesophageal rupture.

#### REFERENCES

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